

*Equisetum fluviatile* - (*Eleocharis smallii*) Herbaceous Vegetation (Water Horsetail - Spikerush Marsh)

COMMON NAME	Water Horsetail - (Marsh Spikerush) Herbaceous Vegetation
SYNONYM	Water Horsetail - Spikerush Marsh
PHYSIOGNOMIC CLASS	Herbaceous Vegetation (V)
PHYSIOGNOMIC SUBCLASS	Perennial forb vegetation (V.B)
PHYSIOGNOMIC GROUP	Temperate or subpolar perennial forb vegetation (V.B.2)
PHYSIOGNOMIC SUBGROUP	Natural/Semi-natural (V.B.2.N)
FORMATION	Semipermanently flooded temperate perennial forb vegetation (V.B.2.N.e)
ALLIANCE	EQUISETUM FLUVIATILE SEMIPERMANENTLY FLOODED HERBACEOUS ALLIANCE

CLASSIFICATION CONFIDENCE LEVEL 2

USFWS WETLAND SYSTEM PALUSTRINE

RANGE

***Voyageurs National Park***

This community is fairly uncommon in the park. It is most abundant in the larger bays like Daley and Tom Cod, though some stands may also be found in the many smaller bays throughout the park.

***Globally***

This association is found in Minnesota, Manitoba, and Ontario.

ENVIRONMENTAL DESCRIPTION

***Voyageurs National Park***

This type occurs in sheltered bays and shores and along slow moving streams throughout the park. Wave exposure is typically low. Standing water is typically present up to 0.5 m deep. Substrate is clay or shallow peat over clay. The water regime is permanently flooded to intermittently exposed. This community is fairly uncommon in the park. It is most abundant in the larger bays like Daley and Tom Cod, though some stands may be found in the many smaller bays as well. Stands may be ephemeral due to fluctuating water levels in the large lakes.

***Globally***

Stands occur in wave-washed shores, sandbars, and stream channels. Substrate is mineral soil (often sand), sometimes held together by root mats. The water regime is permanently flooded to intermittently exposed, and water depth is generally less than 1 m (Harris *et al.* 1996).

MOST ABUNDANT SPECIES

***Voyageurs National Park***

<u>Stratum</u>	<u>Species</u>
Forb	<i>Acorus calamus</i> , <i>Sagittaria rigida</i> , <i>Sparganium chlorocarpum</i>
Fern	<i>Equisetum fluviatile</i>

***Globally***

<u>Stratum</u>	<u>Species</u>
Fern	<i>Equisetum fluviatile</i>
Graminoid	<i>Eleocharis smallii</i>

CHARACTERISTIC SPECIES

***Voyageurs National Park***

*Equisetum fluviatile*, *Acorus calamus*, *Sagittaria rigida*, *Sparganium chlorocarpum*

***Globally***

*Eleocharis smallii*, *Equisetum fluviatile*, *Sparganium fluctuans*

VEGETATION DESCRIPTION

***Voyageurs National Park***

This herbaceous community is dominated by *Equisetum fluviatile*, *Acorus calamus*, *Sagittaria rigida*, and/or

*Sparganium chlorocarpum*. Stands may be dominated by just one of these species or they may occur mixed. Most commonly, *Equisetum fluviatile* may mix with *Acorus calamus*. *Acorus calamus* may also mix with *Sagittaria rigida* and, less commonly, *Sparganium chlorocarpum*. Other herbs that may be present but do not reach dominance include *Sium suave*, *Cicuta bulbifera*, and *Polygonum lapathifolium*. Aquatic species may also be present at low density and include *Potamogeton* spp., *Utricularia intermedia*, and *Najas flexilis*.

**Globally**

Emergent cover is greater than 25%, and floating-leaved and submergent cover is low. Emergent graminoids < 1 m dominate the stands, including *Equisetum fluviatile* and/or *Eleocharis smallii*. Associated species of low constancy include *Glyceria borealis*, *Isoetes echinospora*, *Potamogeton gramineus*, and *Utricularia vulgaris* (Harris *et al.* 1996). In northern Minnesota, stands most commonly have a mix of *Equisetum fluviatile* and *Acorus calamus*. *Acorus calamus* may also mix with *Sagittaria rigida* and, less commonly, *Sparganium chlorocarpum*. Other herbs that may be present but do not reach dominance include *Sium suave*, *Cicuta bulbifera*, and *Polygonum lapathifolium*. Aquatic species may also be present at low density and include *Potamogeton* spp., *Utricularia intermedia*, and *Najas flexilis* (M. Smith personal communication 1999).

CONSERVATION RANK G4.

DATABASE CODE CEGL005258

COMMENTS

**Voyageurs National Park**

Diagnostic features of the type include the herbaceous layer dominated by *Equisetum fluviatile*, *Acorus calamus*, *Sagittaria rigida*, and/or *Sparganium chlorocarpum*. Most analogous to Ontario's W5 (Harris *et al.* 1996), though more broadly defined to include W6 as well. When dominated solely by *Equisetum fluviatile*, this type can grade into the Wiregrass Sedge Shore Fen (CEGL005229).

REFERENCES

Harris, A. G., S. C. McMurray, P. W. C. Uhlig, J. K. Jeglum, R. F. Foster, and G. D. Racey. 1996. Field guide to the wetland ecosystem classification for northwestern Ontario. Ont. Minist. Nat. Resour., Northwest Sci. Tech. Field Guide FG-01. Thunder Bay, Ont. 74 p.